

REMARKS

The allowance of Claim 27 is noted, along with the indication that Claims 19 and 25 - 26 would be allowable if written in independent form. Claims 19 and 25 are being written in independent form, with Claim 26 depending from Claim 25, and applicant trusts that those claims will now be allowed.

In rejecting Claims 1 - 5, 7 - 18 and 20 - 23 under 35 U.S.C. §102 as being anticipated by either Murphy (U.S. 5,530,342) or Ward (U.S. 6,621,279), the Examiner has once again failed to appreciate a key element of applicant's invention which makes it fundamentally different than the devices shown in the references – namely, the electrostatic coupling between the masses.

In Murphy, the electrostatic coupling is not between the masses, but rather between the masses 310, 312 and the combs, with combs 340, 342 function as drive combs and combs 344, 346 serving as pickup combs. All of the combs are stationary, and the two masses are connected together electrically by an unnumbered lead at the input to sense amplifier 328. With the two masses at the same electrical potential, they cannot interact electrostatically because an electrostatic force requires a difference in electrical potential between two bodies.

Likewise, in Ward, the electrostatic coupling is between drive electrodes 14, 16 and masses 20, 22 and between the masses and pickoff electrode 28, not between the masses themselves.

The electrostatic coupling between the masses in applicant's invention takes the place of conventional mechanical coupling such as the flexures 30 shown in Ward.

Claim 1 and the claims depending therefrom (Claims 2 - 5 and 7 - 11) distinguish over Murphy and Ward in calling for means for coupling the masses together through electrostatic forces which are a function of the relative positions of the masses; Claims 12 - 18 and 20 distinguish in calling for first and second masses which are coupled together electrostatically and mounted in a manner permitting anti-phase dithering motion along a first axis and differential motion along a second axis in response to a Coriolis force, Claims 21 - 22 distinguish in calling for a plurality of capacitive coupling plates attached to the masses and interleaved along the first axis to provide electrostatic coupling between the masses when a voltage is applied to the plates; and Claim 23 distinguishes in calling for capacitive coupling plates attached to the masses

and disposed in facing relation to each other along the first axis to provide electrostatic coupling between the masses when a voltage is applied to the plates.

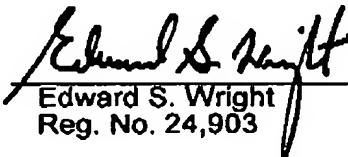
Without masses which are coupled together electrostatically or means for coupling the masses together electrostatically, Murphy and Ward do not anticipate, and the rejection of Claims 1 - 5, 7 - 18 and 20 - 23 under 35 U.S.C. §102 is clearly erroneous.

The rejection of Claims 6 and 24 under 35 U.S.C. §103 as being unpatentable over Buestgens (U.S. 5,895,850) in combination with Clarke et al. and Seshia et al. is likewise erroneous. Claim 6 depends from Claim 1 and defines the means for coupling the masses together as including a third mass which is coupled electrostatically between the first and second masses. Claim 24 calls, *inter alia*, for capacitive coupling plates attached to the masses and disposed in facing relation to each other along the first axis to provide electrostatic coupling between the first and third masses and between the second and third masses when a voltage is applied to the plates. Buestgens is cited as showing the use of a third mass 3, but the coupling between that mass and the others is by resonating springs 4, 5, which once again is mechanical, not electrostatic.

With this amendment, Claim 27 has been allowed, Claims 19 and 25 have been written in the form which the Examiner has indicated would make them and dependent Claim 26 allowable, and the remaining claims are believed to be directed to patentable subject matter for the reasons discussed above. With this amendment, the application should be in condition for allowance.

The Commissioner is authorized to charge any fees required in this matter, including extension fees, or to credit any overpayment, to Deposit Account 50-2975, Order No. A-71587.

Respectfully submitted,


Edward S. Wright
Reg. No. 24,903

Law Offices Of Edward S. Wright
1100 Alma Street, Suite 207
Menlo Park, CA 94025
(650) 330-0830 (Telephone)
(650) 330-0831 (Facsimile)
twright@claim1.com